

Abstract

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Title of thesis: Imunologické a histologické metody ve výzkumu Huntingtonovy nemoci

Bachelor thesis

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Huntington's disease (HD) is a severe autosomal inherited neurodegenerative disorder that affects individuals regardless of gender. This disorder is caused by an expansion of CAG repeats in huntingtin gene, that is expressed in almost all tissues. Mutant protein causes a neuron degeneration in a brain of HD patients which leads to a motor abnormalities and personality decay. The disease develops in the presence of a mutation in one of two huntingtin alleles. The risk of transmission of disease for the direct descendants is 50%. This disease is very malign because of its late onset. An adequate therapy does not exist yet, but a lot of research teams focus on designing a suitable medical treatment.

This work is devoted to the description of Huntington's disease and is focused on immunological and histological methods used in animal model experimental studies. Particular techniques are described and the results are supported with figures.

Key words: Huntington's disease, CAG repeat, immunological and histological methods, animal model